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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|------------------------|-------------------|----------------------|-------------------------|------------------|--|
| 10/696,261 | 10/29/2003 | James M. Wilson | K1774DIV2 | 7899 | |
| 270 | 7590 05/27/2005 | | EXAMINER | | |
| HOWSON AND HOWSON | | | WHITEMAN, BRIAN A | | |
| ONE SPRING | HOUSE CORPORATION | CENTER | | | |
| BOX 457 | | | ART UNIT . | PAPER NUMBER | |
| 321 NORRIS | TOWN ROAD | 1635 | | | |
| SPRING HOUSE, PA 19477 | | | DATE MAILED: 05/27/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|---|--|--|--|--|
| | 10/696,261 | WILSON ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| · · | Brian Whiteman | 1635 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period who is less than those to reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEE | ely filed will be considered timely. the mailing date of this communication. 0 (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on | _• | | | | |
| 2a) This action is FINAL . 2b) This | <u> </u> | | | | |
| 3) Since this application is in condition for allowan | ce except for formal matters, pro | secution as to the merits is | | | |
| closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 3 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-10 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdraw | n from consideration. | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6) Claim(s) is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8)⊠ Claim(s) <u>1-10</u> are subject to restriction and/or e | election requirement. | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examine | r, | | | | |
| 10) The drawing(s) filed on is/are: a) acce | epted or b) objected to by the E | Examiner. | | | |
| Applicant may not request that any objection to the o | drawing(s) be held in abeyance. See | 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correcti | on is required if the drawing(s) is obj | ected to. See 37 CFR 1.121(d). | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign | priority under 35 LLS C. & 119(a) | -(d) or (f) | | | |
| a) All b) Some * c) None of: | priority under 50 C.C.C. 3 110(a) | (4) 01 (1). | | | |
| 1. Certified copies of the priority documents | s have been received. | | | | |
| 2. Certified copies of the priority documents | | on No | | | |
| 3. Copies of the certified copies of the prior | ity documents have been receive | d in this National Stage | | | |
| application from the International Bureau | (PCT Rule 17.2(a)). | | | | |
| * See the attached detailed Office action for a list of | of the certified copies not receive | d. | | | |
| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) 🔲 Interview Summary | (PTO-413) | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | te | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) ∐ Notice of Informal Pa 6) ☑ Other: <i>Notice to Con</i> | atent Application (PTO-152) nply. | | | |

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Claims 1-10 are pending.

This application contains sequence disclosures that are encompassed by the definition for nucleotide sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements for Patent Applications Containing Nucleotide Sequence Disclosures.

There are nucleotide sequences in Figures 2 and 3B and the sequences are missing a corresponding SEQ ID NO. The nucleotide sequences appear to be in the CRF.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 2 and 4-6, drawn to a method of a delivering a heterologous nucleic acid encoding a protein to at least one muscle cell in a mammalian subject using an rAAV virion, classifiable in class 424, subclass 93.2.
- II. Claim 3, drawn to a method of delivering an antisense RNA to at least one muscle cell in a mammalian subject using an rAAV virion, classifiable in class 514, subclass 44.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). The instant specification does

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not disclose that these methods would be use together. In the instant case the different inventions are directed to delivering different nucleotide sequences to a cell. Invention I is directed to delivering a nucleotide sequence encoding a protein to a cell and Invention II is directed to delivering an antisense RNA molecule to a cell. Each nucleotide sequence has a different mode of operation, different function, and different effect in a cell. Therefore, each method is divergent in material and steps. For these reasons the Inventions I and II are patentably distinct. Furthermore, searching the Inventions of groups I and II together would impose a serious search burden because each method comprises distinct steps and products. As such, it would burdensome to search the inventions of Groups I and II. The search for each method is not coextensive.

Claims 1 and 7-10 link(s) inventions I and II. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 1 and 7-10. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

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Because these inventions are distinct for the reasons given above and the search required for each Group listed above is not required for any other Group listed above and the search for each group is not co-extensive, restriction for examination purposes as indicated is proper.

It would be unduly burdensome for the examiner to search and consider patentability of all of the presently pending claims, a restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention: a protein selected from cytokines, growth factors, differentiation factors in claim 5, alpha1-antitrypsin and erythropoietin in claim 6.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 2, and 4 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 § 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Whiteman whose telephone number is (571) 272-0764. The examiner can normally be reached on Monday through Friday from 7:00 to 4:00 (Eastern Standard Time), with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang, acting SPE - Art Unit 1635, can be reached at (571) 272-0811.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal

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Mall 1. The faxing of such papers must conform with the notice published in the Official

Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Brian Whiteman 1635

Drier h. Atomo

Notice to Comply

| Application No. | Applicant(s) | | |
|-----------------|---------------|--|--|
| 10/696,261 | Wilson et al. | | |
| Examiner | Art Unit | | |
| B. Whiteman | 1635 | | |

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE **DISCLOSURES**

Applicant must file the items indicated below within the time period set in the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a))

| The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s): |
|---|
| 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). |
| 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c). |
| 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e). |
| 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." |
| 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d). |
| 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e). |
| ☑ 7. Other: Seq ID No is missing for the nucleotide sequences in Fig 2 and Fig. 3B. |
| Applicant Must Provide: ☐ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing". |
| ☐ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the specification. |
| A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d). |
| For questions regarding compliance to these requirements, please contact: |
| For Rules Interpretation, call (571) 272-2510 For CRF Submission Help, call (571) 272-2501/2583. PatentIn Software Program Support |
| Technical Assistance703-287-0200 To Purchase PatentIn Software703-306-2600 |
| PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY |